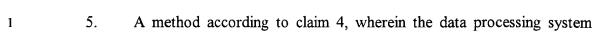


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WHAT IS CLAIMED IS:

- 1. A method for selectively increasing the performance of a customer's
- 2 data processing system, wherein the data processing system has a maximum
- 3 performance level, the method comprising:
- 4 providing a first authorization key to the data processing system, the first
- 5 authorization key allowing an initial performance level that is less than the maximum
- 6 performance level of the data processing system;
- receiving a request from the customer for an increase in performance of the
- 8 data processing system; and
- providing a second authorization key that increases the performance level of
- the data processing system above the initial performance level.
- 1 2. A method according to claim 1, wherein the second authorization key
- 2 has an expiration date.
- 3. A method according to claim 3, wherein the data processing system
- 2 returns to the initial performance level when the second authorization key expires.
- 4. A method according to claim 1, wherein the second authorization key
- 2 has a maximum time of use, the maximum time of use specifying the maximum time
- that the data processing system can execute above the initial performance level.



returns to the initial performance level when the maximum time of use specified by the

3 second authorization key is reached.

1 6. A method for selectively changing the performance of a data processing

2 system, wherein the data processing system includes one or more processors that can

selectively operate at a performance level that is below a maximum performance level

4 of the processor, the method comprising:

5 providing an authorization key to the data processing system, wherein the

authorization key specifies a new performance level for at least one of the processors;

7 and

2

3

2

3

8 increasing the performance level of at least one processor to the new

9 performance level.

7. A method according to claim 6, further comprising the step of verifying

2 the authorization key.

8. A method according to claim 7, wherein the data processing system has

a corresponding serial number and the authorization key specifies a serial number, the

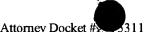
verifying step comparing the serial number of the data processing system to the serial

4 number of the authorization key.



- 9. A method according to claim 8, further comprising the step of 1 preventing the increasing step if the serial number of the authorization key does not 2 3 match the serial number of the data processing system.
- 1 10. A method according to claim 7, wherein the data processing system maintains a current date and the authorization key specifies an expiration date, the 2 verifying step comparing the expiration date of the authorization key to the current 3 date maintained by the data processing system to determine if the authorization key has 4 expired. 5
- A method according to claim 10, further comprising the step of 11. 1 2 preventing the increasing step if the authorization key has expired.
- A method according to claim 10, further comprising the step of 12. 1 decreasing the performance level of the at least one processor designated by the 2 authorization key to a previous performance level when the authorization key expires. 3
- A method according to claim 7, wherein the authorization key specifies 1 13. a maximum time of use, the verifying step determining if the time of increased 2 performance level of the at least one processor exceeds the maximum time of use. 3

- 1 14. A method according to claim 13, further comprising the step of 2 preventing the increasing step if the increase in performance level of the at least one
- 3 processor has exceeded the maximum time of use.
- 1 15. A method according to claim 13, further comprising the step of
- decreasing the performance level of the at least one processor designated by the
- authorization key to a previous performance level when the time of increased
- 4 performance level of the at least one processor exceeds the maximum time of use.
- 1 16. A method according to claim 6, wherein the providing and increasing
- 2 steps are performed while the data processing system is in use.
- 1 17. A method according to claim 6, wherein the performance level of the at
- 2 least one processor is increased under software control.
- 1 18. A method according to claim 17, wherein the performance level of the
- 2 at least one processor is increased under the control of the operating system of the data
- 3 processing system.
- 1 19. A method according to claim 18, wherein the operating system
- 2 maintains a table that includes entries that identify the processors in the data processing
- system, and further identify the allowed performance level of each processor.



- A method according to claim 19, wherein the performance level of 1 20. selected processors is increased by changing the corresponding entries in the table to a 2 new performance level. 3
- 1 21. A method according to claim 20, wherein the operating system detects 2 the changes in the table, and changes the performance level of the corresponding 3 processors to the new performance level.
- 22. A method according to claim 21, further comprising changing selected 1 entries in the table so that the performance level of selected processors are returned to 2 a previous performance level. 3
- 23. A method according to claim 6, wherein the authorization key is 1 encrypted, and the authorization key is decrypted before use. 2
- 24. A method for selectively changing the performance of a data processing 1 system, wherein the data processing system includes two or more processors and a 2 limit is placed on the number of processors that are available for use, the method 3 comprising: 4
- providing an authorization key to the data processing system, wherein the 5 authorization key specifies a new limit on the number of processors that are available 6 7 for use; and



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- one or more of the processors that were previously unavailable for use.

increasing the performance level of the data processing system by activating

- 1 25. A method according to claim 24, further comprising the step of verifying the use of the authorization key.
- 1 26. A method according to claim 25, wherein the data processing system
- 2 has a corresponding serial number and the authorization key specifies a serial number,
- 3 the verifying step includes comparing the serial number of the data processing system
- 4 to the serial number of the authorization key.
- 1 27. A method according to claim 25, wherein the data processing system
- 2 maintains a current date and the authorization key specifies an expiration date, the
- 3 verifying step comparing the expiration date of the authorization key to the current
- date maintained by the data processing system to determine if the authorization key has
- 5 expired.
- 1 28. A method according to claim 27, further comprising the step of
- 2 preventing the increasing step if the authorization key has expired.
- 1 29. A method according to claim 27, further comprising the step of de-
- 2 activating selected processors so that the number of active processors is less than or
- 3 equal to the original limit of processors when the authorization key expires.

- 1 30. A method according to claim 25, wherein the authorization key
- 2 specifies a maximum time of use, the verifying step determining if the time of the
- 3 increased performance level of the data processing system exceeds the maximum time
- 4 of use.
- 1 31. A method according to claim 30, further comprising the step of
- 2 preventing the increasing step if the time of the increased performance level of the data
- 3 processing system exceeds the maximum time of use.
- 1 32. A method according to claim 30, further comprising the step of de-
- activating enough processors so that the number of active processors is less than or
- 3 equal to the original limit of processors when the time of use of the additional
- 4 processors exceeds the maximum time of use.
- 1 33. A method according to claim 24, wherein the providing and increasing
- 2 steps are performed while the data processing system is in use.
- 1 34. A method according to claim 24, wherein the one or more processors
- 2 are activated under software control.
- 1 35. A method according to claim 34, wherein the one or more processors
- 2 are activated by the operating system of the data processing system.



- A method according to claim 35, wherein the operating system 36. 1
- maintains a table that includes entries that identify the processors in the data processing 2
- system, and further identify which processors are available for use. 3
- A method according to claim 36, wherein the increasing step changes 37. 1
- selected entries in the table to indicate that one or more of the processors that were 2
- previously unavailable for use are now available for use. 3
- 38. A method according to claim 37, wherein the operating system detects 1
- the changes to the table, and ups the processors that are indicated as available for use 2
- that were previously unavailable for use. 3
- 39. A method according to claim 38, further comprising changing selected 1
- entries in the table so that selected processors that are available for use are de-2
- activated and become unavailable for use to return to the original limit on the number 3
- of processors that are available for use. 4
- A method according to claim 39, wherein the operating system detects 40. 1
- the changes to the table, and downs the processors that are indicated as unavailable for 2
- use.

